

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

1. (Currently Amended) A method for efficient processing of a document encoded in a markup language, the method comprising the step of:

communicating ~~an array-based~~ a data model representing the document ~~to an application process~~ through a bus of a printed circuit board from a special purpose processor configured for processing the encoded document, to a general purpose processor configured for further processing of the encoded document as processed by the special purpose processor.

2. (Original) The method of claim 1, wherein said data model represents a document encoded in mXML.

3. (Original) The method of claim 1, wherein said data model represents a document encoded in XML.

4. (Currently Amended) A method for efficient processing of a document encoded in a markup language, the method comprising the steps of:

receiving a document intended for delivery to a target;

processing the document using a special purpose processor dedicated to processing of documents encoded in the markup language; and

passing the processed document to the target for further processing by a general purpose processor including a microprocessor that is separate from the special purpose processor.

5. (Original) The method of claim 4, wherein said processing step comprises parsing the document.

6. (Original) The method of claim 4, wherein said processing step comprises performing a transformation on the document.

7. (Original) The method of claim 4, wherein said processing step comprises creating an array-based model of the document.

8. (Original) The method of claim 4, wherein said processing step comprises creating a tree-based model of the document.

9. (Currently Amended) The method of claim 4, wherein said special purpose processor comprises ~~an~~ a dedicated integrated circuit that is specially configured for parsing the document.

10. (Currently Amended) The method of claim 4, wherein said special purpose processor comprises a supplemental general purpose ~~processor~~ microprocessor for executing computer readable code for parsing the document, said supplemental general purpose ~~processor~~ microprocessor being distinct from a primary general purpose ~~processor~~ microprocessor.

11. (Original) The method of claim 4, wherein said passing step comprises communicating the document, as processed, to an application process through a bus of a printed circuit board.

12. (Currently Amended) The method of claim 4, wherein said passing step comprises communicating the document, as processed, to a target via a communications network.

13. (Currently Amended) The method of claim ~~12~~ 4, wherein the target is a local application process.

14. (Currently Amended) The method of claim ~~13~~ 4, wherein the target is a remote device.

15. (Currently Amended) A system for efficient processing of a document encoded in a markup language, the system comprising:

a memory;

a general purpose processor operatively connected to said memory for executing computer readable code stored in said memory, said computer readable code configuring said general purpose processor to perform processing distinct from certain processing of documents encoded in the markup language; and

a special purpose processor operatively connected to said memory said special purpose processor being specially configured for certain processing of documents encoded in the markup language;

wherein said special purpose processor is a dedicated processor.

16. (Original) The system of claim 15, wherein said special purpose processor is configured for parsing documents encoded in machine-oriented extensible markup language (mXML).

~~48~~ 17. (Original) The system of claim 15, wherein said special purpose processor is configured for transforming documents encoded in machine-oriented extensible markup language (mXML).

~~49~~ 18. (Currently Amended) The system of claim 15, wherein said special purpose processor comprises an a dedicated integrated circuit that is specially configured for processing the document.

~~20~~ 19. (Currently Amended) The system of claim ~~49~~ 18, further comprising:
a telecommunications device operatively connected to said general purpose processor and capable of communicating via a communications network; and
a first program stored in said memory and executable by said general purpose processor for controlling said special purpose processor to process the document, and for communicating the document, as processed, to a target.

~~24~~ 20. (Currently Amended) The system of claim ~~20~~ 19, further comprising:
a second program stored in the memory and executable by said general purpose processor for recognizing the document as encoded in the markup

language and responsively controlling said special purpose processor to process the document.

22 21. (Original) The system of claim 15, wherein said special purpose processor comprises a supplemental general purpose processor for executing computer readable code for processing the document.

23 22. (Currently Amended) The system of claim 22-21, wherein said computer readable code is configured for processing the document in machine-oriented extensible markup language (mXML) .

24 23. (Currently Amended) The system of claim 22-21, further comprising:
a telecommunications device operatively connected to said general purpose processor and capable of communicating via a communications network; and
a first program stored in said memory and executable by said general purpose processor for controlling said special purpose processor to process the document, and for communicating the document, as processed, to a target.

25 24. (Currently Amended) The system of claim 24-23, further comprising:
a second program stored in the memory and executable by said general purpose processor for recognizing the document as encoded in the markup language and responsively controlling said special purpose processor to process the document.

26 25. (Original) A printed circuit board comprising:

a general purpose processor for executing computer readable code stored in a memory; and

a special purpose processor operably connected to said general purpose processor for communicating therewith, said special purpose processor being configured for processing documents encoded in a markup language.

~~27~~ 26. (Currently Amended) The printed circuit board of claim ~~26~~ 25, wherein said special purpose processor comprises ~~an~~ a dedicated integrated circuit that is specially configured for processing the document.

~~28~~ 27. (Currently Amended) The printed circuit board of claim ~~27~~ 26, wherein said processing includes parsing and/or transforming of the document.

~~29~~ 28. (Currently Amended) The printed circuit board of claim ~~26~~ 25, wherein said special purpose processor comprises a supplemental general purpose processor.

~~30~~ 29. (Currently Amended) The printed circuit board of claim ~~29~~ 28, further comprising:

a memory operably connected to said supplemental general purpose processor; and

computer readable code stored in said memory and executable by said supplemental general purpose processor for processing the document.

30. (New) The method of claim 1, wherein said special purpose processor comprises a first microprocessor, and said general purpose processor comprises a second microprocessor separate from said first microprocessor.